

TABLE 5.3.13.2—Planned Projects Under the Proposed Action and Associated Waste Projections

Project Title	Project Description^a	Expected Waste Streams and Quantities
D&D Building 194 line of flight tube	D&D project	No changes to routine waste generation. Several tons of debris would be disposed. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste.
D&D Building 808	D&D project	No changes to routine waste generation. Assuming 1,500 ft ² removed, 9 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
D&D Building 412	D&D project	No changes to routine waste generation. Assuming 29,000 ft ² removed, 190 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
D&D Building 175 North Section	D&D project	No changes to routine waste generation. Assuming 16,000 ft ² removed, 100 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
D&D Building 212 ITC Accelerator Building	D&D project	No changes to routine waste generation. Assuming 60,000 ft ² removed, 360 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

Project Title	Project Description^a	Expected Waste Streams and Quantities
D&D Building 251	EPD heavy element handling facility.	No changes to routine waste generation. Assuming 32,000 ft ² removed, 190 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
D&D Building 419	EPD materials handling and processing facility.	No changes to routine waste generation. Assuming 8,000 ft ² removed, 48 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
D&D Building 171	Storage building.	No changes to routine waste generation. Assuming 9,000 ft ² removed, 54 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted).
Increased administrative limit for plutonium in Super block	Increase to 1,500 kg fuel-grade Pu, 500 kg enriched uranium, and 3,000 kg depleted uranium.	No changes to routine waste generation.
Integrated Technology Project	Plutonium isotope separation project in Building 332	See Appendix N 1. Hazardous: 0.42 m ³ /yr 3. TRU: 10.42 m ³ /yr 2. LLW: 10.42 m ³ /yr 4. Mixed Waste: 0.42 m ³ /yr
Energetic Materials Processing Center	Consolidates some existing high explosives operations into modern facility.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² .
Increased Tritium Facility material limits	Increase MAR to 30 grams tritium and tritium limits to 35 grams.	New operation would be expected to generate: Hazardous: No change LLW: 4 m ³ /yr TRU: 0 Municipal Solid Waste: No change D&D work: approximately 2 tons per 1,000 ft ² , 20-40 m ³ LLW

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

Project Title	Project Description^a	Expected Waste Streams and Quantities
Increased MAR limit for Plutonium Facility	Increase from 20 kg to 60 kg fuel-grade equivalent plutonium in each of two rooms.	No change to routine waste generation.
Materials Science Modernization Project	Research complex to conduct NNSA program precision fabrication and materials experiments.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² .
High Explosives Development Center	Replace and modernize chemistry and materials science facilities.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² .
Berkeley Waste Drums	Transport LBNL TRU and mixed TRU waste drums to LLNL for shipment to WIPP.	No changes to routine waste generation.
Projected Increase in Worker Population	Approximately 10 percent increase in workforce across LLNL.	10 percent increase across all categories.
Building Utilities Upgrade	Upgrades to building utilities systems for technological or maintenance reasons.	Construction wastes would be expected, approximately 2 tons per 1,000 ft ² .
Building Seismic Upgrades	Upgrades for buildings seismic deficiencies.	Construction wastes would be expected, approximately 2 tons per 1,000 ft ² .
CBNP Expansion	New technologies for Chemical and Biological Nonproliferation Program.	Very low volumes of chloroform, formaldehyde and biological waste.
Petawatt Laser Prototype	Develop petawatt capability in Building 381.	New operation would be expected to generate. Hazardous: several metric tons per year LLW: 0 TRU: 0 Municipal Solid Waste: several metric tons per year Construction: approximately 2 tons per 1,000 ft ²

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

Project Title	Project Description ^a	Expected Waste Streams and Quantities
NIF Materials	NNSA proposed experiments with materials	New operation would be expected to generate: Hazardous: 15 metric tons per year LLW: 190 m ³ /yr MLLW: 6.9 m ³ per year TRU: none Municipal Solid Waste: several metric tons per year Construction: approximately 2 tons per 1,000 ft ²
NIF Neutron Spectrometer	Add neutron spectrometer to the NIF	New operation would be expected to generate: Hazardous: none Municipal Solid Waste: (included in site-wide quantities) Construction: approximately 2 tons/1,000 ft ²
Consolidated Security Facility	50K gross square feet facility to house Security Department. support staff; currently collocated	No changes to routine waste generation. Consolidation of existing operations. Construction wastes would be expected, approximately 2 tons per 1,000 ft ²
Building 696R Mixed Waste Permit	Permit modification to authorize managing hazardous and mixed waste in Building 696 (currently manages TRU wastes only). Replaces capability of Building 280.	No changes to routine waste generation. Consolidation of existing operations.

Source: LLNL 2002y, TiNUS 2003.

^a Detailed project descriptions are provided in Appendix A.

CBNP = ; D&D = decontamination and decommissioning; EPD = ; ft² = square foot/feet; ITC = ; ITC = ; K = thousand; kg = kilograms; LBNL = Lawrence Berkley National Laboratory; LLW = low-level waste; LLNL = Lawrence Livermore National Laboratory; m³/yr = cubic meters per year; MAR = material-at-risk ; MLLW = mixed low-level waste; NIF = National Ignition Facility; PSA = project specific analysis; TRU = transuranic; TSCA = *Toxic Control Substance Act*; WIPP = Waste Isolation Pilot Plant.